

VERSION TO SHOW MARKINGS OF CHANGES MADE

IN THE TITLE:

Please change the title of the application to read as follows:

-- METHOD AND APPARATUS FOR GENERATING IMAGES ON
PHOTOGRAPHIC MATERIAL --.

IN THE SPECIFICATION:

On page 1, after the title, insert the following heading:

-- BACKGROUND OF THE INVENTION;

On page 1, lines 2-5, change "The invention relates to a device and method to generate photographic images per the overall concepts of Patent Claims 1 and 4 or 13 and 14, as well as a system to generate such images" to -- The invention relates to a method and to printer apparatus for generating photographic images on strip-shaped photographic material and thereafter cutting the photographic material to individual picture lengths . --

On page 6, before line 1, insert the following heading:

-- SUMMARY OF THE INVENTION --;

and delete lines 5 and 6 and insert -- This object, as well as other objects which will become apparent from the discussion that follows, are achieved, according to the present invention, by providing printer apparatus comprising:

-
- (a) a projector device for projecting image information for a plurality of photographic pictures onto strip-shaped photographic material, and for projecting marks onto the photographic material that indicate the positions for cutting the material; and
- (b) a controller, coupled to the projector device, for producing control signals to cause the projection of said marks onto the photographic material.--.

On page 10, delete lines 13-16 in their entirety and substitute the following paragraph and heading:

-- For a full understanding of the present invention, reference should now be made to the following detailed

description of the preferred embodiments of the invention as illustrated in the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS; --

line 17, after "Figure 1", insert -- shows --; line 18, after "generate", insert -- photographic -- line 19, after "Figure 2", change "an example of" to -- shows -- and after "projected", changed ",," to -- . --.

On page 11, lines 1, after "Figure 3", insert -- shows -- line 3, change ",," to -- . --; line 4, after "Figure 4", insert -- shows --; line 6, change ", and" to -- . --; line 7, after "Figure 5", insert -- shows --; after "generate", insert -- photographic --; delete lines 9-11 and insert the following heading and paragraph:

-- DESCRIPTION OF THE PREFERRED EMBODIMENTS

The preferred embodiments of the present invention will now be described with reference to Figs. 1-5 of the drawings. Identical elements in the various figures are designated with the same reference numerals. --

On page 32, after the last line, insert the following paragraph:

-- There has thus been shown and described a novel method and apparatus for generating images on photographic material which fulfills all the objects and advantages sought therefor. Many changes, modifications, variations and other uses and applications of the subject invention will, however, become apparent to those skilled in the art after considering this specification and the accompanying drawings which disclose the preferred embodiments thereof. All such changes, modifications, variations and other uses and applications which do not depart from the spirit and scope of the invention are deemed to be covered by the invention, which is to be limited only by the claims which follow. --

IN THE CLAIMS:

In line 1, delete "Patent Claims:" and insert:

C L A I M S

What is claimed is:

Please cancel claims 1-21 and substitute the following new claims 22-42:

-- 22. Printer apparatus for producing images, comprising,
in combination:

(a) a projector device for projecting image information
for a plurality of photographic pictures onto strip-
shaped photographic material, and for projecting marks
onto the photographic material that indicate the
positions for cutting the material; and

(b) a controller, coupled to the projector device, for
producing control signals to cause the projection of
said marks onto the photographic material.

23. Apparatus as in claim 22, wherein said marks contain
information in addition to indicating the positions for
cutting the photographic material.

24. Apparatus as in claim 23, wherein said marks include at
least one of a beginning-of-order and end-of-order
indication, thereby indicating at least one of the first and
last picture of an order for printing photographs.

25. Apparatus for producing photographic images, comprising
in combination:

(a) a projector device for projecting, onto strip-shaped photographic material, image information for a plurality of photographic pictures, photographic test information as well as marks that designate the test information; and

(b) a controller device, coupled to the projector device, for producing control signals to cause the projector device to project said marks, such that the projection of image information may be monitored by means of the test information.

26. Device as in claim 25, wherein said marks include at least one piece of information which identifies the printer apparatus.

27. Apparatus as in claim 25, said the marks include at least one bar code.

28. Apparatus as in claim 25, wherein the test information includes a plurality of gray-scale shades.

29. Apparatus as in claim 25, wherein the controller device is further operative to generate control signals to cause

the projection of marks that may be used for cutting the strip-shaped photographic material, and wherein the projector device is operative, in dependence upon said control signals, to project such marks onto the photographic material.

30. Apparatus as in claim 24, wherein the projector device projects the image information row by row.

31. Apparatus as in claim 24, wherein the projector device includes exposure means for exposing the light-sensitive photographic material to said image information.

32. Apparatus as in claim 31, wherein the projector device includes a plurality of lasers for exposing said image information.

33. Apparatus as in claim 24, further comprising transport means for transporting the strip-shaped photographic material into a printing area of the projection device, and wherein the projector device is so configured that the marks are accurately projected onto the strip-shaped photographic material when the transport means transports the strip-shaped photographic material into the printing area thereof.

34. In printer apparatus for producing photographic images, comprising, in combination:

(a) a projector unit for projecting image information for a plurality of photographic pictures onto strip-shaped photographic material;

(b) a control unit; coupled to the projector unit, for controlling the projector unit;

the improvement wherein the control unit produces control signals and transmits the control signals to the projector unit, and wherein the projector unit projects the marks which exactly indicate the positions for cutting the photographic material onto the strip-shaped photographic material in response to the control signals received from the control unit.

35. In a printing device for producing images in which image information associated with a plurality of pictures as well as test information projected onto strip-shaped photographic material by means of a projector unit;

the improvement comprising a controller unit coupled to the projector unit, for producing control signals for causing the projector unit to project marks that may be used to designate test information;

whereby the projection of the image information may be monitored via the test information; and whereby both the test information and the marks used to designate test information are projected onto the strip-shaped photographic material by the projector unit in dependence upon the control signals.

36. A system for generating images, comprising:

- (a) a printing device in accordance with claim 23;
- (b) a detector for detecting said marks projected onto strip-shaped photographic material; and
- (c) a cutter for cutting the strip-shaped photographic material onto which the image information was projected to form individual pictures;

said cutter being operative to cut the strip-shaped photographic material, in dependence upon detection of the

marks by the detector, directly at those positions at which the marks are projected onto the strip-shaped photographic material.

37. System as in claim 36, wherein the detector is positioned adjacent to the cutter.

38. System as in claim 36, further comprising a sorter to sort the individual pictures in dependence upon the additional information in the encoded marks.

39. A system for generating images comprising, in combination:

- (a) a printing device in accordance with claim 25;
- (b) an evaluator for evaluating the test information projected onto the strip-shaped photographic material;
- (c) a detector for detecting the marks projected onto the strip-shaped photographic material that designate the test information; and
- (d) an adjustor for adjusting the projection of the image information via the printing device in dependence

upon the evaluation of the test information and the detection of the marks used to designate the test information.

40. System as in claim 39, further comprising a plurality of said printing devices.

41. System as in claim 39, wherein the evaluator is connected with the printing device via a network.

42. System as in claims 39, wherein the evaluator is a densitometer. --

IN THE ABSTRACT:

Please add the ABSTRACT OF THE DISCLOSURE on the attached sheet.

ABSTRACT OF THE DISCLOSURE

The invention relates to a device (20) and method for generating images and to a system (10; 140) for producing images. The aim of the invention is to enable a simple and inexpensive generation of images and marks on strip-shaped recording material and thus to enable an effective production of images. To this end, an output unit (13) is provided for outputting image information onto strip-shaped

recording material (22). The image information is assigned to a plurality of images. Drive signals for applying marks (34, 36-39) which can be used for a cutting of the strip-shaped recording material (22) can be generated by a control means (15). The invention also provides that marks (54) can be generated which serve to denote test information (57).

This test information is used for verifying the output of the image information. The output unit (13) is connected to the control means (15) in order to receive the drive signals. The output unit (13) is configured in such a way that, according to the drive signals, it additionally applies marks (34, 36-39), which can be used for cutting, onto the strip-shaped recording material (22). The output unit (13) can additionally or alternatively output the marks (54), which denote the test information (57), and can output the test information (57) itself.